REMARKS

Claims 1-28 are pending in this application. Claims 11-12 have been amended to provide proper antecedent basis for the term "host driver module" as defined in independent claim 7. Accordingly, entry of the amendments of claims 11-12 is proper under 37 C.F.R. §1.116(b) because those amendments simply remove the basis of any potential §112 rejections and to place all claims either in condition for allowance or in better condition for appeal.

Claims 1-28 have been **finally** rejected under 35 U.S.C. §103 as being unpatentable over Heil et al, U.S. Patent No. 6,173,374 as modified to incorporate selected features from Angelo et al., U.S. Patent No. 6,061,794. In support of this final rejection, the Examiner has repeated verbatim the reasons supporting the rejection as stated on selected paragraphs of pages 2-13 of the first Office action without addressing how the cited elements of Heil '374 can actually constitute the claimed elements of Applicants' claims 1-28. In fact, the Examiner did not take note of the Applicants' arguments with respect to claims 1-28 on pages 5-15 of the Amendment filed on April 5, 2001 and answer the substance of them as required by M.P.E.P. §707.07(f). M.P.E.P. §707.07(f), as the Examiner is quite aware, provides as follows in pertinent part (emphasis added):

> Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.

In the present situation, the Examiner has **not** taken note of Applicants' argument and, likewise, has **not** answered the substance of the Applicants' traversal of the improper rejection of claims 1-28.

For example, in response to Applicants' detailed rebuttal of how the cited portions of Heil '374 fail to disclose each of Applicants' claimed feature, i.e., a "host driver module" installed in a host system which comprises "a **Local Transport** arranged to provide an interface to an input/output platform (IOP) supporting an array of input/output devices;" "a **Remote Transport** arranged to provide an interface to said another system;" and "a **Connection Manager** arranged to establish connection services and to create a direct call path between the Local Transport and the Remote Transport so as to provide access to IO devices" as generally defined in claims 1, 4, 7, 14, 22 and 27, the Examiner simply repeats the same rationale, as previously asserted in the first Office action. On page 10 of the final Office action (Paper No. 5), the Examiner asserts that,

> Heil ['374] teach an access module, a module including a processor(s) (100) associated memory (105), and a local memory bus (PCI 116.5, i.e I/O bus), and an interface input/output bus forming an input/output processor (117), element(s) (117 alone or with 116) form an input/output platform IOP access module (Heil: Fig. 1-5A, host system, col 6/lines 34-64, host 150 communicatively coupled to host 151 via network medium, col 8/lines 12-23), module for providing input/output device access between a host (151) system and another (151) system supporting an array of input/output (118) storage devices (Heil: col 4/lines 3-20); a module (Heil: Fig. 5A, 181) arranged to provide an interface (Heil: Fig. 5A, 120) means to said another (151) system node (Heil: Fig. 5A and 1, col 4/lines 21-29), and module comprising (Heil: Fig. 5A, 171) arranged to establish connection services and to create a direct call path between the module 118 and the module 181 so as to provide access to input/output (117.8 and 117.9) devices driver coupled to local storage (Heil: Fig. 5A, 118) devices (direct call path means established via a peer-to-peer communication path (i.e. devices on a layer communication network that operate on the same application protocol level), direct peer-to-peer communication path, col 8/lines 8-24, nodes having direct interface-to-interface connection via communication medium, col 8/lines 50-56, direct port-

> to-port connection or via a network that supports data transmission (i.e., data network) peer-to-peer connection via device drives, col 10/lines 28-50.

This assertion is nothing more than a verbatim copy of the same rationale previously asserted in the first Office action with labels. Even more puzzling is the Examiner's conclusion that Heil '374 teaches all features of claim 1, for example, based on this hollow assertion. Applicants do not understand how the Examiner arrives to this conclusion given the fact that an express admission was made in the first Office action (Paper No. 3) that,

> Heil ['374] does **not** teach an access module arranged to establish a service connection to a local input/output platform (IOP) running on host server of particular system area network and establishing a associated system area network management communication channel; nor module (180) arranged to provide an interface to an input/output platform (IOP) supporting an array of input/output devices is denoted "Local Transport", nor module (I 8 1) arranged to provide an interface to said another system is denoted "Remote Transport". See page 2 of Paper No. 3 dated on March 13, 2001.

In other words, Heil '374 which at the time of the first Office action (Paper No. 3) does **not** teach all features of claim 1, has now disclosed all feature of the same claim 1 according to the final Office action (Paper No. 3). Of course, if the Examiner's conclusion is correct as asserted in the final Office action (Paper No. 3), then there is no need to cite Angelo '794 as a secondary reference for support of an obviousness rejection. However, the Examiner's assertion and conclusion are incorrect. New numeral labels inserted on page 10 of the final Office action do not constitute features of claims 1, 4, 7, 14, 22 and 27.

For example, the Examiner cites FIGs. 1-5A, col 6/lines 34-64 and col 3/lines64-col 4/line 29 of Heil '347 for allegedly disclosing "[an input/output platform (IOP) access] module for providing input/output device access between a host (151) system and another (151) system"

[preamble of claims 1, 4, 7, 14, 22 and 27]. However, the cited portions of Heil '347 refer to the use of a host bus adapter "HBA" which is a device which adapts (connects) a host computer system as shown in FIG. 1 to an I/O device as well as to connect to a Fibre Channel backbone. The host bus adapter "HBA" 117 of Heil '347 may correspond to a network interface card "NIC" 328 shown in FIG. 3 of Applicants' disclosed invention which is arranged to adapt a host computer system to an I/O device as well as to connect to a SAN. However, the HBA 117 of Heil '347 does not constitute an IOP access module as defined in claim 1, for example, and shown in FIG. 3 as a separate module from the SAN NIC 328.

The Examiner next states:

> "a module (Heil: Fig. 5A, 181) arranged to provide an interface (Heil: Fig. 5A, 120) means to said another (151) system node (Heil: Fig. 5A and 1, col 4/lines 21-29), and module comprising (Heil: Fig. 5A, 171) arranged to establish connection services and to create a direct call path between the module 118 and the module 181 so as to provide access to input/output (117.8 and 117.9) devices (Heil: Fig. 5A, 180) and (Heil: Fig. 1, 117.8, 117.9)."

This generic statement is used to allegedly disclose Applicants' claimed "**Local Transport** arranged to provide an interface to an input/output platform (IOP) supporting an array of input/output devices;" "**Remote Transport** arranged to provide an interface to said another system;" and "**Connection Manager** arranged to establish connection services and to create a direct call path between the Local Transport and the Remote Transport so as to provide access to IO devices" all of which are components of an IOP access module as expressly defined in claim 1. However, the cited FIG. 5A, element 181 of Heil '374 refers once again to a host bus adapter "HBA". FIG. 5A, element 120 of Heil '374 refers to a fiber channel chip which is a critical component of the HBA that is

connected to the PCI bus 116.5 and the Fibre Channel backbone 121. FIG. 5A, element 171 of Heil '374 refers to a front-end interface (IF) of either a HBA 180 or HBA 181 to provide an interface to a PCI bus 116.5. Neither of these cited elements constitutes the features of claim 1. As shown in FIG. 5A (an alternative embodiment) of Heil '374, two HBAs 180 and 181 may be utilized in a single node (or host computer system). HBA 180 is used to process IO requests directed to local devices 118. HBA 181 is used to support remote IO requests from the Fibre Channel backbone 121. These two HBA 180 and 181 are hardware devices configured to perform stated specific functions. The Examiner simply cannot cite a single HBA 117 (see FIG 1) in one embodiment of Heil '374 to correspond Applicants' claimed IOP access module, and then cite two other HBAs 180, 181 (see FIG. 5) in another embodiment of Heil '374 to corresponding the Local Transport and Remote Transport components of Applicants' claimed IOP access module, and worse yet, cite an internal hardware of the same HBAs 180, 181 to correspond the Connection Manager component of Applicants' claimed IOP access module. This is highly improper. Two prior art HBA devices cannot be distorted and improperly interpreted in such a way just to read on Applicants' claimed IOP access module, particularly when the prior art HBA hardware devices are completely different from Applicants' claimed IOP access module which is a part of a host driver module.

Likewise, in response to Applicants' detailed rebuttal of how the cited portions of Heil '374 fail to disclose Applicants' claimed feature, i.e., "service connection to a local input/output platform (IOP) connected to a local bus using a driver module" as defined in claim 23, the Examiner seemingly cites col 9/lines 43-48 of Heil '374 for disclosing this feature. The cited col 9/lines 43-48

of Heil '374 discloses nothing more than the use of a front-end interface 171 as part of a HBA 171 used to connect to PCI bus 117.4. No driver module is disclosed.

Again, in the interest of expedition, Applicants hereby request the Examiner to reconsider and withdraw this rejection for reasons discussed below.

The present invention describes the use of a driver module 310 installed in a host system comprising a Connection Manager 312, a Local Transport 314 and a Remote Transport 316 configured for the purposes of exporting device access to remote devices on a data network (SAN) as shown in FIG. 3 and expressly defined in each of independent claims 1, 4, 7, 14 and 22. For example, Local Transport 314 is arranged to provide an interface to IOP 320 on the PCI bus 318 supporting an array of IO devices 326. Remote Transport 316 is arranged to provide an interface to remote devices (remote servers) via a SAN. Connection Manager 312 is utilized to establish connection services and create a direct call path between the Local Transport 314 and the Remote Transport 316 so as to provide access to IO devices 326. Data structure pointers as shown in FIG. 4 are exchanged between the Local Transport 314 and the Remote Transport 316 by way of the Connection Manager 312 in order to establish a direct-call relationship between separately installed software modules.

The driver module system 310 may be initialized as defined by independent process claim 23 as follows: The Local Transport 314 scans the PCI bus 318 to locate and initialize all local IOPs and builds an opaque "context" structure for each IOP found. The Remote Transport 316 then prepares to accept requests through network interface card (NIC) 328. The Connection Manager 312

then queries the Local Transport 314 to determine the number of IOPs and builds a descriptor structure for each IOP (IOP descriptor structure includes an exported table of function call pointers and the context required by the Local Transport 314 to communicate with the IOP), and establish a management communication channel through the Remote Transport 316, which waits for an external connection from a remote server via a SAN for exporting local device access using said direct call path between the Local Transport 314 and the Remote Transport 316.

This driver module system 310 allows, for example, a distributed database running on a cluster of servers to share and directly access all the storage in the cluster transparently. As a result, the overhead incurred by the OS stack on the remote node is avoided via "short-circuiting" at the driver level. In addition, it is no longer necessary for the database to generate special application-to-application messages to remote nodes in order to access IO devices located on remote storage.

In contrast to Applicants' independent claims 1, 4, 7, 14, 22 and 27, Heil '374 as a primary reference discloses the use of one or more host bus adapters HBA 112 as shown in FIG. 2 and 180, 181 as shown in FIG. 5A installed in a host system of a clustered computer network for processing IO requests received from the host system. Each HBA also serves as a network interface card (NIC) connected to a peer HBA via a Fibre Channel backbone 121 (high-speed communication medium) and contains therein a directory within memory 116 for storing location information regarding blocks of data stored in storage devices and software for searching the directory to determine whether to locally or remotely retrieve blocks of data. The HBA installed in one node of a clustered computer network is operable to establish and maintain communications with at least one other HBA installed

in another node of the clustered computer network. The HBA of Heil '374 is NOT a driver module as defined by Applicants' claimed invention.

There is **no** disclosure anywhere from Heil '374 of Applicants' claimed "host driver module" installed in a host system which comprises "a Local Transport arranged to provide an interface to an input/output platform (IOP) supporting an array of input/output devices;" "a Remote Transport arranged to provide an interface to said another system;" and "a Connection Manager arranged to establish connection services and to create a direct call path between the Local Transport and the Remote Transport so as to provide access to IO devices" as generally defined in claims 1, 4, 7, 14, 22 and 27.

Nevertheless, the Examiner continues to assert, in support of the rejection of claim 23, that,

> Heil ['374] discloses an access module including a processor(s) associated memory, and a local memory bus, and an input/output bus forming an input/output platform (IOP) access module (Fig. 1-5A, col 6/lines 34-64), module for providing input/output device access between a host system and another system (col 3/lines 64-col 4/line 29), module arranged to establish a service connection to a local (IOP) connected to a local bus using a driver module in response to a request from a remote server on a computer system network, establishing connection process comprising the steps of: beginning initialization of said driver module (col 12/lines 26-37, Fig. 4A-4D, steps 500, 510, 518, 529) which provides access to a local storage system while bypassing protocol stacks of a host operating system (providing a direct request call access while bypassing OS specific portion layer, bypassing 250, 260 access means independent of OS, Fig. 2, col 10/lines 28-65), said driver module comprising a module 180 (Local Transport) which provides direct access to the local storage device system (col 4/lines 3-20), a module 181 (Remote Transport) which interfaces to other nodes of said system network (col 4/lines 21-29, Fig. 5A remote node N), and connection means (Connection Manager) which provides connection services and coordinating functions responsible for creating a direct call path between the Local Transport and the Remote Transport (direct path between the module 118 and the module 181 so as to provide access to input/output (117.8 and 117.9) devices driver coupled to local storage (Fig. 5A, 118) devices); searching process (scanning)

> to locate and initialize all local input/output platforms (IOPs) peer HBA modules, and building an IOP context directory structure (map) (i.e. descriptors and addresses of routines located with a region of memory) for each input/output platform (IOP) found responsive (col 12/lines 9-col 13/line 3); (managing, making arrangements for, i.e. preparing) means to take, be given, receive (i.e. accept) a request for a service connection from said remote server on said system network (col 11/lines 36-53, col 12/lines 9-19, Fig. 3); query via scanning means itemize responsive input/output IOP on build map (col 11/lines 53-col 65, col 12/lines 8-59), and building a descriptor structure for each IOP which includes an exported directory table having function call (col 13/lines 5-15) address pointer and characteristic parameters to support communication with the input/output platform (IOP) found (col 12/lines 9-col 13/line 13); and establishing a communication channel through the Remote Transport, which waits for an external connection from said remote server on said system network for shipping (exporting) local device access resources onto said system network using said direct call path between the Local Transport and the Remote Transport (col 10/lines 28-65).

The Examiner has also cited Angelo '794 for allegedly disclosing the features of Applicants' claim 23. However, neither Heil '374 nor Angelo '794 discloses the features as the Examiner has alleged. Virtually all the citations from either Heil '374 or Angelo '794 are misplaced. Even more puzzling is the fact that no where in Angelo '794 is there disclosure of any module denoted as "Local Transport" and "Remote Transport" as identified by the Examiner as lacking from Heil '374.

For example, the cited col. 6, lines 34-64 of Heil '374 for allegedly disclosing Applicants' claimed "service connection to a local input/output platform (IOP) connected to a local bus using a driver module" as defined in claim 23 is incorrect. That cited portion of Heil '374 simply depicts a host system as shown in FIG. 1 including essential components such as CPU 100, cache 105, processor bus 110, host-to-PCI bus bridege 115 and a PCI bus 116. No reference to any input/output platform (IOP) as defined in claim 23, see FIG. 3.

The cited col. 4, lines 3-20 of Heil '374 for allegedly disclosing Applicants' claimed "module (Local Transport) which provides direct access to the local storage system" is also incorrect. That cited portion of Heil '374 describes a host bus adapter (HBA) which is a hardware component adapted to connect a host system to an IO device as well as to connect to a Fibre Channel backbone. The HBA of Heil '372 is analogous to the SAN network interface card (NIC) 328 shown in FIG. 3 of the disclosed invention. In contrast to the HBA of Heil '372, Applicants' claimed "Local Transport" is a part of the driver module along with the Remote Transport and the Connection Manager and is arranged to provide an interface to an IOP supporting an array of IO devices.

The cited col. 4, lines 21-29, FIG. 5A of Heil '374 for allegedly disclosing Applicants' claimed "module (Remote Transport) which interfaces with other nodes of said system network" is also incorrect. That cited portion of Heil '374 describes how the host bus adapter (HBA) which is a hardware component installed in each node of a Fibre Channel is able communicate among each other as peers. Again, **no** disclosure of any "Remote Transport".

More importantly, no attempt to cite any portion from either Heil '374 or Angelo '794, and none is found for disclosing Applicants' claimed "Connection Manager which provides connection services and coordinate functions responsible for creating a direct call path between the Local Transport and the Remote Transport."

The cited col. 12, line 9 extending to col. 13, line 13 of Heil '374 for allegedly disclosing Applicants' claimed "building [an IOP] descriptor structure for each input/output platform (IOP) which includes an exported table of function call pointers and the context required by the Local

Transport to communicate with the input/output platform (IOP)" is likewise incorrect. That cited portion of Heil '374 only describes how the host system and the HBA are initialized and how the HBAs build a local directory containing the mapped location information for respective local storage subsystems 504. The Examiner asserts that Applicants' claimed IOP descriptor structure as shown in FIG. 4 is analogous to the use of an HBA directory (map) (i.e. descriptors and addresses of routines located with a region of memory). However, this assertion is completely flawed. Applicants' claimed "IOP descriptor structure" is established for a direct call interface between the Local Transport 314 and Remote Transport 316 in order to access to each IOP. In contrast to Applicants' claimed "IOP descriptor structure" the HBA directory of Heil '374 is used to map location information of local storage subsystems. Therefore, no IOP descriptor structure is disclosed by Heil '374.

Regarding independent claims 1, 7 and 14, the Examiner continues to assert that Heil '374 further discloses,

> an access module, module including a processor(s) associated memory, and a local memory bus, and an input/output bus, i.e., an input/output platform access module (Heil: Fig. 1-5A, col 6/lines 34-64), a module for providing input/output device access between a host system and another system (Heil: col 3/lines 64-col 4/ line 29) comprising: a module (Heil: Fig. 5A, 180) arranged to provide interface (Heil: Fig. 1, 117.8, 117.9) means to an input/output platform (IOP) supporting an array of input/output (118) storage devices (Heil: col 4/lines 3 -20); a module (Heil: Fig. 5A, 181) arranged to provide an interface (Heil: Fig. 5A, 120) means to said another system node (Heil: Fig 5A and 1 (151), col 4/lines 21-29); and module comprising (Heil: Fig. 5A, 171) arranged to establish connection services and to create a direct call path between the module 118 and the module 181 so as to provide access to input/output (117.8 and 117.9) devices driver coupled to local storage (Heil: Fig. 5A, 118) devices.

Again, none of the cited portions of Heil '374 discloses what the Examiner has alleged. For example, the cited col. 6, lines 34-64 of Heil '374 does not disclose any "service connection to a local input/output platform (IOP) connected to a local bus using a driver module" as defined in claim 23. Rather, that cited portion of Heil '374 simply depicts a host system as shown in FIG. 1 including essential components such as CPU 100, cache 105, processor bus 110, host-to-PCI bus bridege 115 and a PCI bus 116. Similarly, the cited col. 4, lines 3-20 of Heil '374 does NOT disclose any claimed "module (Local Transport) which provides direct access to the local storage system". Rather, that cited portion of Heil '374 only describes a host bus adapter (HBA) which is a hardware component adapted to connect a host system to an IO device as well as to connect to a Fibre Channel backbone. Likewise, the cited col. 4, lines 21-29, FIG. 5A of Heil '374 does NOT disclose any claimed "module (Remote Transport) which interfaces with other nodes of said system network". Instead, that cited portion of Heil '374 only describes how the host bus adapter (HBA) which is a hardware component installed in each node of a Fibre Channel is able communicate among each other as peers. Furthermore, the cited FIG. 5A, element 171 of Heil '374 does NOT disclose any claimed "Connection Manager which provides connection services and coordinate functions responsible for creating a direct call path between the Local Transport and the Remote Transport" as defined in claim 1. Rather, element 171 is simply a front-end interface as shown in FIG. 5A for providing an interface to a PCI bus 116.5. There is no disclosure of any "Connection Manager" whatsoever.

Regarding dependent claims 4, 15 and 24, the Examiner continues to assert that the combined teachings of Heil '374 and Angelo '794 further teach,

> wherein said IOP which comprises: at least one or more input/output processors (Heil: col 9/lines 49-59, element (114.9); at least one storage device as said input/output devices (col 6/lines 65-col 7/line 4, col 7/lines 51-56); a device driver module arranged to control access via interface means with said storage device (Heil: col 7/line 1-56); a communication layer which defines a mechanism for communications between the Local Transport and the device driver module (Heil: col 10/lines 66-col 11/line 11, 45-53, element (240)).

Again, none of the cited portions of Heil '374 discloses what the Examiner has alleged. This is because no where in Heil '374 is there disclosure of any IOP as defined in claims 4, 15 and 24. Therefore, the cited portions of Heil '372 do NOT disclose the specific configuration of an IOP as comprising one or more IO processors, IO devices, a device driver module and a communication layer which defines a mechanism for communications between the Local Transport and the device driver module.

Regarding dependent claims 5, 9, 16 and 25, the Examiner asserts that the combined teachings of Heil '374 and Angelo '794 further teach,

> wherein said communication layer is responsible for managing all service requests (Heil: col 11/lines 36-53, cot 12/lines 9-19) and providing a set of software comprising used to initiate communication with a network services via peer-to-peer communication or call services (i.e. APIs), (Heil: col 9/lines 11-18) for delivering messages, along with a set of support routines that process the messages (Heil: col 8/lines 24-49).

Again, if Heil '374 does NOT disclose any IOP as defined in claims 4, 15 and 24, then there is no possibility of any disclosure from Heil '374 of any claimed "communication layer [of an IOP]

for managing all service requests and providing a set of Application Programming Interfaces (APIs) for delivering messages, along with a set of support routines that process the messages" as defined in claims 5, 10, 16 and 25.

Regarding dependent claims 6, 10, 16 and 25, the Examiner continues to assert that the combined teachings of Heil '374 and Angelo '794 further teach,

> wherein said communication layer comprises a message layer which sets up a communication session (Heil: col 11/lines 66-col 11/line 11, 45-53), and a transport layer which defines how information will be shared (Heil: col 10/lines 66-col 11/line 11, coordinate retrieval of shared information).

Again, if Heil '374 does NOT disclose any IOP as defined in claim 4, then there is no possibility of any disclosure from Heil '374 of any claimed "communication layer [of an IOP] which sets up a communication session, and a transport layer which defines how information will be shared" as defined in claims 6, 10, 16 and 25.

Regarding dependent claim 11, the Examiner asserts that the combined teachings of Heil '374 and Angelo '794 further teach,

> wherein said system driver module and said device driver module constitute a single device (Heil: col 4/lines 3-4) that is operable independent of the host operating system and operable at any different host computer (i.e. portable) across a plurality of operating systems and host network platforms (Heil: col 4/lines 13-29), and works interoperably with a plurality of storage devices and operating systems (Heil: col 4/lines 4-20).

Again, none of the cited portions of Heil '374 discloses what the Examiner has alleged. This is because no where in Heil '374 is there disclosure of any "Local Transport" and "Remote Transport" as defined in independent claim 9. Similarly, no where in Heil '374 is there disclosure

of any combination of "system driver module" and "device driver module" as defined in independent claim 9. Therefore, the cited col. 4, lines 3-4 of Heil '372 simply describes the use of a host bus adapter (HBA).

Regarding dependent claims 20, 26 and 27, the Examiner asserts that the combined teachings of Heil '374 and Angelo '794 further disclose,

> wherein said Local Transport further has a send means and said Remote Transport further has a receive means which are respective program interfaces for receiving an receiving message from a remote server on said computer network for direct access to local input/output platform and for delivering an sending message to said remote server on said computer network (Angelo: receiving means-. col 2/lines 4-14, col 2/line 66-col 3/line 10, 41-48, sending means, col 3/lines 1 1-2 1).

Again, if Heil '374 and Angelo '794 do NOT disclose any "Local Transport" and "Remote Transport" as defined in claims 19 and 23, then there is no possibility of any disclosure from Heil '374 or Angelo '794 of any claimed "send handler function" and "receive handler function which are respective program interfaces for receiving an inbound message from a remote server on said computer network for direct access to local input/output platform and for delivering an outbound message to said remote server on said computer network" as expressly defined in claims 20, 26 and 27.

Under 35 U.S.C. §103, the Examiner must not only demonstrate that all elements of the claims are described in one or more prior art references but also point to something in the prior art references that suggest in some way a modification of a particular reference or a combination of references in order to arrive at Applicants' claimed invention.

In the present situation, neither Heil '374, nor Angelo '794 discloses and suggests Applicants' claims 1-28. Therefore, Applicants respectfully request that the rejection of claims 1-28 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

INTERVIEW:

In the interest of expediting prosecution of the present application, Applicants respectfully request that an Examiner interview be scheduled and conducted. In accordance with such interview request, Applicants respectfully request that the Examiner, after review of the present Amendment, contact the undersigned local Washington, D.C. area attorney at the local Washington, D.C. telephone number (703) 312-6600 for scheduling an Examiner interview, or alternatively, refrain from issuing a further action in the above-identified application as the undersigned attorneys will be telephoning the Examiner shortly after the filing date of this Amendment in order to schedule an Examiner interview. Applicants thank the Examiner in advance for such considerations. In the event that this Amendment, in and of itself, is sufficient to place the application in condition for allowance, no Examiner interview may be necessary.

Attached hereto is a marked-up version of the changes made to the claims. The attached page is captioned "**Version with markings to show changes made**."

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1,136. Applicants have submitted fees for the claims added by this Amendment. Please charge any shortage of fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account of Antonelli, Terry, Stout & Kraus, No. 01-2135 (Application No. 219.36435X00), and please credit any excess fees to said deposit account.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claims 11-12, as follows:

11. (Amended) The host system of claim 9, wherein said [system] host driver module and said device driver module constitute a single device that is portable across a plurality of operating systems and host network platforms, and works interoperably with a plurality of storage devices and operating systems.

12. (Amended) The host system of claim 9, wherein said [system] host driver module and said device driver module operate in accordance with an Intelligent Input/Output (I_2O) specification for allowing storage devices to operate independently from the operating system.